

20010816.qrp v02_n283.qrl.20010816

Date: Thu, 16 Aug 2001 19:03:06 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 2283

QRP-L Digest 2283

Topics covered in this issue include:

- 1) [104993] RE: Got IT!
by <schoon@amgt.com>
- 2) [104994] Re: Gain
by William R Colbert <w5xe@juno.com>
- 3) [104995] New Book....:)
by David Gilson <kd3em@velocity.net>
- 4) [104996] Re: ARLB033 FCC Invites Comments on ARRL's 60-Meter Petition
by Joel M Denison <hamjoel@juno.com>
- 5) [104997] RE: 75 to 52 ohms
by Nick Kennedy <nkennedy@tcainternet.com>
- 6) [104998] New Elecraft MH2 Microphone with Heil Element
by Eric Swartz WA6HHQ - Elecraft <eric@elecraft.com>
- 7) [104999] grid-leak bias
by anthony@pacinfosb.com
- 8) [105000] Re: Got IT!
by Phil Wheeler <w7ox@earthlink.net>
- 9) [105001] MP-1 Ant.
by "KB8JRB" <kb8jrb@columbus.rr.com>
- 10) [105002] Re: grid-leak bias
by Tom <kkleiner@megsinet.net>
- 11) [105003]
by "KB8JRB" <kb8jrb@columbus.rr.com>
- 12) [105004] RE: 75 to 52 ohms
by Pete Burbank <plburbank@kih.net>
- 13) [105005] NEQRP CW Net, 16 August 01, 8:30 PM EDT, 3.565MHz
by Chuck Ludinsky <cjl@mitre.org>
- 14) [105006] Re: grid-leak bias
by Bob Liesenfeld <wb0poq@visi.com>
- 15) [105007] Sierra 60M Band Module update
by W0rw@aol.com
- 16) [105008] Re: FOX: Cub foxii please hear me!
by Ed Lawson <elawson@lawson-philpot.com>
- 17) [105009] Fox Hunting
by "Jason Hissong" <jhisson1@columbus.rr.com>
- 18) [105010] Re: FOX: Cub foxii please hear me!
by KC1FB <kc1fb@optonline.net>
- 19) [105011] Huntsville hamFest

by "w8diz" <w8diz@fpqrp.com>
20) [105012] The Cabela Pan Fish Pole
by "Lee S. Mairs" <lmairs@cox.rr.com>
21) [105013] Re: MP-1 Ant.
by "Jim Worthington" <ad4j@arrl.net>
22) [105014] Everything's Ready for Huntsville Hamfest QRP Activities & Dixie-Q
Campout
by "Craig W. Behrens" <craigwb@hiwaay.net>
23) [105015] KPC3 Kantronics TNC for Sale
by NM5Mike@aol.com
24) [105016] Re: 75 to 52 ohms
by "Kevin Asato" <kevin.k.asato@worldnet.att.net>
25) [105017] Re: New Book.....:)
by "G3MFJ" <g3mfj@btinternet.com>
26) [105018] Re: New Book.....:)
by DK3RED@t-online.de (Ingo DK3RED)
27) [105019] Re: Are knots bad for antennas?
by Bill Coleman <aa4lr@arrl.net>
28) [105020] RE: Got IT!
by "Karl F. Larsen" <k5di@zianet.com>
29) [105021] Low dipole
by "Karl F. Larsen" <k5di@zianet.com>
30) [105022] Sierra 60M Band Module (Rev. A)
by W0rw@aol.com
31) [105023] QRP'er N3CDR a silent key
by "Mike Czuhajewski" <wa8mcq@erols.com>
32) [105024] WBR WD9EYB Photos
by "James P. Osburn, P.E." <j.p.osburn@ieee.org>
33) [105025] Re: Fw: PSK-31 Expedition to the Boundary Waters
by MertNellis@aol.com
34) [105026] WBR WD9EYB Notes
by "James P. Osburn, P.E." <j.p.osburn@ieee.org>
35) [105027] QRP rigs
by "Tim A. King Jr." <iflyos@hotmail.com>
36) [105028] Re: QRP rigs
by Phil Wheeler <w7ox@earthlink.net>
37) [105029] Re: QRP rigs
by "Brian" <brian@iquest.net>
38) [105030] KPC 3 TNC has been Sold
by NM5Mike@aol.com
39) [105031] FS: OHR 400 with keyer
by "Coleman Callaway" <coleman@callaways.org>
40) [105032] Re: 75 to 52 ohms
by Bob Nielsen <nielsen@oz.net>
41) [105033] Re: QRP rigs
by "Lee S. Mairs" <lmairs@cox.rr.com>
42) [105034] Re: QRP rigs
by "Brian" <brian@iquest.net>

- 43) [105035] Foxii notices
by Dragon Singer <WM-Scace@wiu.edu>
- 44) [105036] Re: QRP rigs
by John Wagner <john@wagner-usa.net>
- 45) [105037] Help a Ham? Scanner Manuals que.
by Philip Karras <ke3fl@yahoo.com>
- 46) [105038] Re: QRP rigs
by Jeff Chambers <jeff.chambers@mindspring.com>
- 47) [105039] Fw: #61 and #62 D68C and KG4IZ !!!
by "George Osier" <gosier@twcnny.rr.com>
- 48) [105040] RE: QRP rigs
by "Hare,Ed, W1RFI" <w1rfi@arrl.org>
- 49) [105041] The Power Management Contest
by Larry Cahoon <lejek@erols.com>
- 50) [105042] FS: Ten Tec Filters & Speech Processor
by Ed Kessler <edkess@pa.net>
- 51) [105043] SMK-1 Kits shipped yet?
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 52) [105044] [CONTEST]QRP Contest Calendar - Aug 16/31
by Ken Newman <N2CQ@citnet.com>
- 53) [105045] FOX: Results After Week 7 (Hunt 14)
by "Marshall Emm" <mgemm@mtechnologies.com>
- 54) [105046] SMK-1 = thanks for replies
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 55) [105047] RE: QRP rigs
by "Hare,Ed, W1RFI" <w1rfi@arrl.org>
- 56) [105048] TT Filters Still FS, Speech Processor Sold
by Ed Kessler <edkess@pa.net>
- 57) [105049] QRP Dinner Get-Together at SW Division Convention in Riverside
by Jim Lowman <jmlowman@ix.netcom.com>
- 58) [105050] FOX: Foxhunt this evening
by John Wagner <john@wagner-usa.net>
- 59) [105051] MININEC vs NEC vs X-Beams
by Beth Gardner / Dan Maguire <BethDan@pacbell.net>
- 60) [105052] TT 1.8KHz Filter Still FS, Remaining items sold
by Ed Kessler <edkess@pa.net>

Date: Wed, 15 Aug 2001 16:05:51 -0700

From: <schoon@amgt.com>

To: <qrp-1@Lehigh.EDU>, <k5di@zianet.com>

Subject: [104993] RE: Got IT!

Message-ID: <c=US%a=%p=American_Geotech%l=AG-CALCITE-BD-010815230551Z-2971@ag-basalt-pxy.amgt.com>

MIME-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Content-Transfer-Encoding: 7bit

It sounds like you're getting the 8 DBi of gain, pointing straight up!!
Is that correct??

.mark

>-----
>From: Karl F. Larsen[SMTP:k5di@zianet.com]
>Sent: Wednesday, August 15, 2001 3:55 PM
>To: Low Power Amateur Radio Discussion
>Subject: Got IT!
>
>
> Fooled around with MMANA which uses MININEC to calculate far
>fields and then you can list the gain from that. Here is what I found out.
>I simulated a 20 meter dipole 20 meters above a real ground and got a gain
>of 7.22 DBi. Then I used a perfect ground and got a gain of 7.80 DBi which
>was what I quoted in earlier messages as 8 DBi.
>
> Then I simulated the 20 meter dipole in free space and wonder of
>wonders I got 2.13 DBi which is the magic number.
>
> So the FACT is that for some good reasons the isotropic radiator
>and the dipole in free space, neither of which exist, are related by the
>fact that the dipole is 2.13 DB stronger than the isopole radiator.
>
> When you put the dipole close to a ground, like a wavelength, it
>has a more compact beam that shows gain of like 8 DBi.
>
>--
>Yours Truly,
>
> - Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
>
>
>
>

Date: Wed, 15 Aug 2001 17:37:16 -0600
From: William R Colbert <w5xe@juno.com>
To: qrp-l@lehigh.edu
Subject: [104994] Re: Gain
Message-ID: <20010815.173718.-16773.12.w5xe@juno.com>
MIME-Version: 1.0
Content-Type: text/plain

Content-Transfer-Encoding: 7bit

Actually, in chapter 2 and 3 of Antennas by Dr. John Kraus (W8JK) he works out the problem (way over me) and the indication is that it is 2.14db. There are, according to him, a number of variables. Bill Orr W6SAI in his antenna books, and others in their antenna books make reference to the 2.1 db isotropic figure.

I have always been told that the isotropic figure is strictly a reference, effective only in absolute vacuum of space. Perhaps, one of the experiments of the high dollar space station - lab could be the actual experiments with antennas to resolve the isotropic figures once and for all.

"Politicians are like nappies. Both should be changed regularly -- and for the same reason"

"Scotsman - Scotsman's Diary 12/97"

Ray Colbert, W5XE, 00TC#3618, SOWP#1064M SOC#78
fp #111 ARCI-5784 NCT2R El Paso, (FAR WEST) TEXAS

Date: Wed, 15 Aug 2001 19:39:00 -0400
From: David Gilson <kd3em@velocity.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [104995] New Book....:)
Message-ID: <3B7B0814.9175CE1A@velocity.net>
MIME-Version: 1.0
Content-Type: text/html; charset=us-ascii
Content-Transfer-Encoding: 7bit

<!doctype html public "-//w3c//dtd html 4.0 transitional//en">

<html>

Hello All,

<p>Did you know that there is a New QRP book on the market!. It's call the "Low Power Scrapbook". You can get it from the ARRL, but it is from the RSGB and the G-QRP Club. I have found that the print is a little on the small size and a couple of the drawings a little hard to read or maybe its a sign of old age hi hi. It is full of 320 pages of good stuff, a few articles from "How to get Started in QRP" and some from the G-QRP Club "Antenna Handbook". On the scale of one to ten, I'll give it a nine just mainly due to the small print.

<p>Best 72's to all.

<p>Dave

KD3EM

ARCI#8126

FPQRP#305

FISTS#8460</html>

Date: Wed, 15 Aug 2001 19:41:10 -0400
From: Joel M Denison <hamjoel@juno.com>
To: J.Bennett@lboro.ac.uk, qrp-l@lehigh.EDU
Subject: [104996] Re: ARLB033 FCC Invites Comments on ARRL's 60-Meter Petition
Message-ID: <20010815.194111.-16556137.0.hamjoel@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Sounds serious

However look how many folk in the US bust whatever just to get
the first 25 khz of each band...phone and cw...
Stop a bit and think of the freqs u actually use..... 100 khz is a
lot.... also a lot of 40 mtrs is unuseable most of the time...

still u are correct... we got a lot more space and for that we
are grateful....

kella joel
in maine...

GET INTERNET ACCESS FROM JUNO!
Juno offers FREE or PREMIUM Internet access for less!
Join Juno today! For your FREE software, visit:
<http://dl.www.juno.com/get/tagj>.

Date: Wed, 15 Aug 2001 18:51:51 -0500
From: Nick Kennedy <nkennedy@tcainternet.com>
To: "'gary.halpern@sympatico.ca'" <gary.halpern@sympatico.ca>, Low Power Amateur
Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [104997] RE: 75 to 52 ohms
Message-ID: <01C125BB.5989CE00.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

I recently put up a 6 meter dipole and used cable TV coax (70 ohms or
thereabouts). Since the dipole's feedpoint impedance is about 70 ohms, my
SWR oughta be pretty close to 1:1, even though my IC-706's SWR meter says
1.5:1. It says that because it's calibrated for 50 ohms.

If you insist on everything being perfect and plan to work a single band, there's some neat stuff you can do with line matching sections. Everyone knows about quarter wave sections that work in specific cases. Twelfth wave transformers are more versatile. And most flexible is the Regier series section transformer, described in the Antenna Book. It uses specific lengths of two different impedance lines to perform the match.

The quarter wave and twelfth wave are both special cases of this. This series section transformer is pretty slick because--

The load can be complex.

Neither line has to match the Z of the load. (One of them must match the desired Z_0 of the line input)

Although you can't match "anything to anything" with two specific lines, say 75 and 50 ohm coax, you can get quite a good range. And there are a lot of line Z_0 's available off the shelf when you consider that you have 25 (two 50's in parallel), 50, 75, 93, 300 & 450 (the last two being twin lead).

I stuck the formulas into an Excel spreadsheet and have had some fun playing with the numbers, but haven't actually used one of these yet.

Yes, you can coild your matching section. (If it's coax.)

But except for the fun of messing with this stuff, I'd say just go ahead and use the 75 ohm line without correction.

72--Nick, WA5BDU

-----Original Message-----

From: Gary Halpern [SMTP:gary.halpern@sympatico.ca]
Sent: Wednesday, August 15, 2001 12:32 PM
To: Low Power Amateur Radio Discussion
Subject: 75 to 52 ohms

I wish to use my cable wiring (75 ohms) to receive and transmit (less than 5 watts) and attach a Lan to (not necessarily at the same time). As such, I need to convert 50 ohms to 75 and vice versa.

Does anyone have plans, a URL or guidance regarding constructing this type of impedance matching transformer?

Gary
VA3GH

Date: Wed, 15 Aug 2001 16:54:25 -0700
From: Eric Swartz WA6HHQ - Elecraft <eric@elecraft.com>
To: QRP-L <qrp-l@lehigh.edu>, GQRP <gqrp@egroups.com>
Subject: [104998] New Elecraft MH2 Microphone with Heil Element
Message-ID: <3B7B0BB1.6C7D04CF@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi,

We have finally added a microphone that matches the K2.

The MH2 Hand Microphone is the result of a collaboration between Bob Heil of Heil Sound and Elecraft. The MH2 uses a high performance condenser element designed by Bob. It is optimally matched to the K2 and provides excellent SSB audio quality.

MH2 Features:

- High output Heil microphone element
- Punchy, High Quality SSB audio in the Heil Sound tradition.
- Pre-wired 8 pin connector for the K2
- Includes microphone mounting clip

First shipments start Sept. 7th.

We have added a picture of the microphone to our web page at:
http://www.elecraft.com/mh2/mh2_hand_mic.htm

If possible, please use our on line order forms to avoid overloading Lisa with calls. Of course feel free to call if you prefer to order that way or have questions.

73, Eric WA6HHQ

--

<http://www.elecraft.com>

Date: Wed, 15 Aug 2001 16:21:58 -0800
From: anthony@pacinfosb.com
To: qrp-l@Lehigh.EDU
Subject: [104999] grid-leak bias
Message-ID: <Chameleon.997919603.Anthony@PID038>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; CHARSET=ISO-8859-1

Maybe someone who knows about tubes can help me here. The subject

is the grid leak biasing technique. Some references I see say that it works because an AC signal on the grid essentially gets rectified and this DC component supplies the needed bias. Other references say the effect is caused by electrons impinging on the grid on their way to the plate, such that the bias will be developed regardless of whether there is signal on the grid or not. Any opinions?

73, WN6Q

Anthony Felino, Pacific Information Design
email: anthony@pacinfosb.com
telephone: (805) 730 1565, x25

Date: Wed, 15 Aug 2001 16:54:10 -0700
From: Phil Wheeler <w7ox@earthlink.net>
To: schoon@amgt.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105000] Re: Got IT!
Message-ID: <3B7B0BA2.6798E9E8@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Likely not straight up. Good discussion of this in Moxon's book.
Likely also at the Cebik web site.

Phil

schoon@amgt.com wrote:

>
> It sounds like you're getting the 8 DBi of gain, pointing straight up!!
> Is that correct??
>
> .mark
>
> >-----
> >From: Karl F. Larsen[SMTP:k5di@zianet.com]
> >Sent: Wednesday, August 15, 2001 3:55 PM
> >To: Low Power Amateur Radio Discussion
> >Subject: Got IT!
> >
> >
> > Fooled around with MMANA which uses MININEC to calculate far
> >fields and then you can list the gain from that. Here is what I found out.

> >I simulated a 20 meter dipole 20 meters above a real ground and got a gain
> >of 7.22 DBi. Then I used a perfect ground and got a gain of 7.80 DBi which
> >was what I quoted in earlier messages as 8 DBi.
> >
> > Then I simulated the 20 meter dipole in free space and wonder of
> >wonders I got 2.13 DBi which is the magic number.
> >
> > So the FACT is that for some good reasons the isotropic radiator
> >and the dipole in free space, neither of which exist, are related by the
> >fact that the dipole is 2.13 DB stronger than the isopole radiator.
> >
> > When you put the dipole close to a ground, like a wavelength, it
> >has a more compact beam that shows gain of like 8 DBi.
> >
> >--
> >Yours Truly,
> >
> > - Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
> >
> >
> >
> >
> >

Date: Wed, 15 Aug 2001 20:17:22 -0400
From: "KB8JRB" <kb8jrb@columbus.rr.com>
To: "QRP-L" <qrp-l@Lehigh.edu>
Subject: [105001] MP-1 Ant.
Message-ID: <006401c125e8\$d20ea4e0\$39575f18@columbus.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Is there some kind of an address for the MP-1 Antenna? I have look but I
gues not in the right place?

Bink KB8JRB
QRP-ARCI # 8141
QRP-L # 2292
6mt NET # 581

Date: Wed, 15 Aug 2001 19:17:49 -0500

From: Tom <kkleiner@megsinet.net>
To: qrp-l@lehigh.edu
Subject: [105002] Re: grid-leak bias
Message-ID: <3B7B112D.A4358B94@megsinet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> My RCA receiving tube manual sez that both sources contribute. This make
> sense to me. Easy enough to prove if you have an operating circuit
> handy. Measure grid bias with and without signal. But aren't they mostly
> used in oscillators and such. In an amp you don't want the bias jumping
> around.

TomK

Date: Wed, 15 Aug 2001 20:37:11 -0400
From: "KB8JRB" <kb8jrb@columbus.rr.com>
To: "QRP-L" <qrp-l@Lehigh.edu>
Message-ID: <008301c125eb\$968315c0\$39575f18@columbus.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

TKS For the Address guy's. 73's

Bink KB8JRB
QRP-ARCI # 8141
QRP-L # 2292
6mt NET # 581

Date: Wed, 15 Aug 2001 20:40:07 -0400
From: Pete Burbank <plburbank@kih.net>
To: "Charles Mabbott" <crmabbott@mediaone.net>, "QRP-Post" <qrp-l@Lehigh.EDU>
Subject: [105004] RE: 75 to 52 ohms
Message-ID: <5.0.2.1.0.20010815201533.00aa46b0@KIH.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 04:30 PM 8/15/2001 -0400, Charles Mabbott wrote:

>Pete,
>The first antenna I put up [Attic Antler] was done
>using 75 Ohm cable. Based on the HW 8 book it showed
>75 Ohm cable also. I had a whole bunch of folks tell
>me it was not right, but my tuner and HW 8 [3.5 watts]
>being unaware of scientific truths, worked anyway.
>
>Made lots of contacts with this setup for a couple of years.
>Got a good deal on 50 Ohm [< 20 bucks, 75 was free]
>and I changed. I would have no problem going back to
>75 is sufficient length [free] is found when time to
>replace existing.....
>
>=====

>Chuck Mabbott
>AA8VS
>42 19' 52" N 83 28' 32" W
>Grid Square EN82gh
>Home Page: <http://aa8vs.dhs.org/aa8vs>
>FP-113 MI-QRP#1212 Firebirds #2117 SOC #445

You have it right Chuck. Most transmitters work well into 70 ohm feedline (which is one reason why I bum hardline from the local cable guys. The stuff is low loss and you can dummy up connectors easily with the 1/2" od stuff to a PL-259. 50 ohms is of course necessary for folks making precise measurements with lab gear. One astute contributor pointed out that low dipoles are not 50 Ohms and likely more like 70. I prefer the Plunging NEC line of software and go with what works. :-)

73 Pete NV4V

Date: Wed, 15 Aug 2001 20:47:32 -0400
From: Chuck Ludinsky <cjl@mitre.org>
To: neqrp@jona1.net, qrp-1@lehigh.edu
Subject: [105005] NEQRP CW Net, 16 August 01, 8:30 PM EDT, 3.565MHz
Message-ID: <3B7B1824.4C3B76AE@mitre.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The New England QRP Club's WQ1RP CW net meets again Thursday night, 16 August 2001, at 8:30 PM EDT (0030Z, 17 August 01) on or near 3.565 MHz. Net control operator for this week's 80M session will be Chuck, K1CL,

operating from Chelmsford, MA.

Last week's net control was John, WB1HBE, also operating from Chelmsford. John reported: "This evenings net went well with 9 qni's and 1 ncs. Signals were generally ok with lots of qrn. The net lasted approx 45 minutes: QNIs as follows:

K1CL	Chuck	Chelmsford, MA	579
K1RC	John	Dracut, MA	579
W1CFI	Paul	Falmouth, MA	549
N1EI	Charlie	Mansfield Cntr, CT	589
W1KRT	Ken	Springfield, NH	579
W1PID	Jim	Sanborton, NH	589
KD1YV	Jim	Bethel, CT	579
W2APF	Thaire	No. Easton, MA	599
KA3WMJ	Ken	Erwinna, PA	569
WB1HBE	John	Chelmsford, MA	NCS

For final comments: K1CL announced that he has posted pictures on our Web page from last Saturday's annual NEQRP meeting at ARRL HQ.

72, John
WB1HBE NEQRP #539"

Hope to CU tomorrow night.

72 DE K1CL,
Chuck.

Date: Wed, 15 Aug 2001 20:02:31 -0500
From: Bob Liesenfeld <wb0poq@visi.com>
To: unlisted-recipients;; (no To-header on input)
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105006] Re: grid-leak bias
Message-ID: <3B7B1BA7.1EA9390D@visi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

anthony@pacinfosb.com wrote:

>
> Maybe someone who knows about tubes can help me here. The subject
> is the grid leak biasing technique. Some references I see say that
> it works because an AC signal on the grid essentially gets rectified
> and this DC component supplies the needed bias.

Hi Tony,

Indeed, if the control grid is driven positive (with respect to the cathode) by an input signal, the grid will capture electrons which then flow in an external circuit.

This ckt generally consists of a cap in series with the signal source, and a resistor from the grid to ground. The cap is charged by the flow of electrons off the grid, but as the grid can not emit electrons back into the tube, (it's not hot, and it is not coated with the rare earth material that can emit them) they drain off to ground 'down' through the resistor. This current flow creates a voltage drop across the resistor, with the 'top' end (connected to the grid) more negative than the bottom. This is the value of bias that the tube then works under. Increase the drive, and the bias value will go up (more negative). Take the drive away and the tube now has 0 V of bias, (see below) and will probably overheat as the plate current will be very high.

The above refers in the main to power tubes, 807, 6146, sweep tube finals etc. Smaller low power tubes like a 12AX7, are sometimes said to run with "contact potential bias". This is the bias you refer to in your post as being due to the grid capturing a small number of electrons from the cathode-plate flow.

It can result in a >small< amount of bias for a tube, and I suppose it happens to some extent in power tubes as well, but it is only used (as far as I know) for small signal, high gain low power applications, with the lower power type receiving tubes.

Hope this clears some of it up.

72

Bob L. WB0POQ

Date: Wed, 15 Aug 2001 21:08:57 EDT
From: W0rw@aol.com
To: qrp-l@lehigh.edu, nick.hulbert@lmco.com
Subject: [105007] Sierra 60M Band Module update
Message-ID: <9d.19e46298.28ac7729@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

i haven't had too much time to work on my 60M Sierra Band Module but here are

my preliminary calculations... mostly extrapolated.
The Xtal (X8) i chose was a 13.20MHz to give 5.2 to 5.35 Mhz coverage,
(a 13.25 Mhz xtal would give all of the proposed band, 5.25 to 5.4 Mhz but
the dial would read zero at 5.25, using the 13.2 xtal the dial will read zero
at 5.20 Mhz).
The PMO frequencies will be 10.115 to 10.265 MHz w/13.20 Mhz xtal.

C1,2,33,36,64,66 and 70 all standard 9-50 pf variables
All these values below are just extrapolated...
C47,49 about 575pf
C48 about 1310 pf
C32,35 about 50pf
C34,65 5pf
L1 about 25uH using an FT37-61 core
T1 secondary same as L1, primary about 2T #26 on FT37-61 core
L3,4 about 13.5 uH using a T37-2 core
L5,6 about 2uH using a T37-2
L8,9 about 5.2 uH using a T37-2
(The output filter L5,6,C47,48,49, could be off a bit-
need to recalculate using the ARRL Handbook tables).
Has anyone gone any further than this ?
i don't have the cores and variable caps to build it yet.
Paul
w01rw@aol.com

Date: Thu, 16 Aug 2001 02:27:41 -0400
From: Ed Lawson <elawson@lawson-philpot.com>
To: qrp-l@lehigh.edu
Subject: [105008] Re: FOX: Cub foxii please hear me!
Message-ID: <20010816022741.A474@work1>
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1

> ----- Original Message -----
> From: KC1FB <kc1fb@optonline.net>
> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
> Sent: Tuesday, August 14, 2001 10:02 PM
> Subject: Re: FOX: Cub foxii please hear me!
>
>
> > Amen,

> > These are more challenging because I think the foxes are using marginal
> > (normal) antlers.

Yes. I use my only HF antenna which is a 132Ft. doublet fed with 450
ohm ladderline. It is up 40+feet and I do live near the top of a hill,
but still
nothing to write home about.

Log in a day or two. Two logs actually.

Ed Lawson
K1VP

Date: Wed, 15 Aug 2001 21:12:18 -0400
From: "Jason Hissong" <jhissong1@columbus.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105009] Fox Hunting
Message-ID: <001a01c125f0\$81b84340\$6401a8c0@columbus.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thanks guys for the responses. I will definately take part in the hunt
tomorrow night. I love CW contesting, and any excuse to get on the air is a
good excuse. I did not know how much fun QRP could be. Cannot wait to get
a K2 in the near future (hey! My birthday is coming up... hehehehehehe)

Thx es 72/73

Jason
N8XE

"For the scientist who has lived by his
faith in the power of reason, the story
ends like a bad dream. He has scaled
the mountains of ignorance; he is about

to conquer the highest peak; as he
pulls himself over the final rock, he is
greeted by a band of theologians who
have been sitting there for centuries."

Dr. Robert Jastrow
Founder of NASA's Institute for Space Studies

Date: Wed, 15 Aug 2001 21:31:46 -0400
From: KC1FB <kc1fb@optonline.net>
To: elawson@lawson-philpot.com, Low Power Amateur Radio Discussion <qrp-
l@Lehigh.EDU>
Subject: [105010] Re: FOX: Cub foxii please hear me!
Message-ID: <011401c125f3\$37679360\$6401a8c0@tp760e>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

Ed,

That's an awesome antler! Mine for most of the hunts is a Center fed Zepp
about 90' long up about 70' at one end and about 55' at the other fed with
450. That extra height doesn't help when the fox is close, that's when I
use my 80m horizontal loop that's only up about 30' average. That's what I
needed to make our ESP contact.

Thanks for having the patience to stick with me and get my call. About half
the time I had to guess at what you needed :)

Jim Francoeur KC1FB QRP-L #29
Member of The New England Hunt Club
Norwalk, CT

----- Original Message -----
From: "Ed Lawson" <elawson@lawson-philpot.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Thursday, August 16, 2001 2:27 AM
Subject: Re: FOX: Cub foxii please hear me!

> ----- Original Message -----
> From: KC1FB <kc1fb@optonline.net>
> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

> Sent: Tuesday, August 14, 2001 10:02 PM
> Subject: Re: FOX: Cub foxii please hear me!
>
>
> > Amen,

> > These are more challenging because I think the foxes are using marginal
> > (normal) antlers.

Yes. I use my only HF antenna which is a 132Ft. doublet fed with 450 ohm ladderline. It is up 40+feet and I do live near the top of a hill, but still nothing to write home about.

Log in a day or two. Two logs actually.

Ed Lawson
K1VP

Date: Wed, 15 Aug 2001 21:34:28 -0400
From: "w8diz" <w8diz@fpqrp.com>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [105011] Huntsville hamFest
Message-ID: <00f401c125f3\$9871a5b0\$39d81b41@cinci.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hey gang,

I'll be at the fest Friday PM thru Sunday AM.
If anyone needs any toroids, let me know asap. I'll deliver them to you personally. Will be monitoring 145.72 simplex.
Check <http://www.kitsandparts.com> for stock.

CU all in Alabamie...

72 & "oo's" - Dieter (DIZ) Gentzow - W8DIZ - Loveland, Ohio
Clermont County - EM79uf - near Cincinnati; 39.218N - 84.305W
SOC-8 DLQRPAG-1454 ARCI-10226 ARS-781 QRPL-1998 10X-9389 CATT-26
FP#-1 <http://home.cinci.rr.com/w8diz> & <http://kitsandparts.com>

Date: Wed, 15 Aug 2001 22:37:16 -0400
From: "Lee S. Mairs" <lmairs@cox.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [105012] The Cabela Pan Fish Pole
Message-ID: <000901c125fc\$5d331660\$6401a8c0@cox.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

My backordered 14' pole arrived today.
It is a very neat, compact package. It even has a nice plastic carrying box
that should hold all sorts of radials and maybe even the loading coil.
Now if only I could find the email that made me order this...
73 de Lee, KM4YY

Date: Wed, 15 Aug 2001 22:44:29 -0400
From: "Jim Worthington" <ad4j@arrl.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [105013] Re: MP-1 Ant.
Message-ID: <NABBICBNJHOBKGPEHLKBCENKFIAA.ad4j@arrl.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The MP-1 is at: <http://www.superantennas.com/>

Ham Radio Outlet was carrying them also the last time I checked.

- Jim, AD4J

Date: Wed, 15 Aug 2001 22:06:00 -0500
From: "Craig W. Behrens" <craigwb@hiwaay.net>
To: "QRP-L QRP-L" <qrp-l@lehigh.EDU>
Cc: "Dieter \((DIZ\) Gentzow--W8DIZ" <w8diz@fpqrp.com>, "NoGa QRP Club"
<nogaqrp@qth.net>
Subject: [105014] Everything's Ready for Huntsville Hamfest QRP Activities &
Dixie-Q Campout
Message-ID: <LPBBIKBNB00LHAAJAHJGGEFCCJAA.craigwb@hiwaay.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The QRP forums this Saturday are all set; we are ready to set-up the QRP
ARCI & Elecraft booth at the civic center Friday afternoon with neat stuff;
I'm moving the motor home to Monte Sano State Park Thursday night so all
will be set up when people start arriving Friday afternoon; the Mystery
Brown Bag Construction Contest is ready to go; the Hex-Pac portable antenna
and 30' mast have arrived for us to try out--just have to pack up all the
food stuff for the cook outs.

Looks like at least 25 of us for the dinners and activities each night. We
can always manage a few more should anyone find out at the last minute that
they can join us.

Ya'll have a safe trip. It'll be great to see your smilin' faces Friday
night ;-)

72/73 & DX,
Craig W. Behrens--NM4T (QQ Editor and Part-Time QRP Event Coordinator)
Madison, AL

Date: Wed, 15 Aug 2001 23:54:35 EDT
From: NM5Mike@aol.com
To: qrp-l@lehigh.edu (Low Power Amateur Radio Discussion)
Subject: [105015] KPC3 Kantronics TNC for Sale
Message-ID: <f4.dfc68ee.28ac9dfb@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I have a Kantronics KPC3 TNC that needs a good home.

\$50.00 Including shipping

Eric NM5M

Date: Wed, 15 Aug 2001 01:10:01 -0700
From: "Kevin Asato" <kevin.k.asato@worldnet.att.net>
To: <gary.halpern@sympatico.ca>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105016] Re: 75 to 52 ohms
Message-ID: <005b01c12561\$afe413a0\$8201a8c0@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

What device(s) are you connecting to the LAN? Last I checked, all coax cabling for 10Base-5 and 10Base-2 LANs is 500hm using RG-8 and RG-58 cabling with 500hm terminators at the ends of the circuit.

Kevin K Asato
KC6POB
ADC PairGain Tech Support
800.638.0031 / 714.730.3222 (tel)
714.730.2400 (fax)

----- Original Message -----
From: Gary Halpern <gary.halpern@sympatico.ca>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Sent: Wednesday, August 15, 2001 10:31 AM
Subject: 75 to 52 ohms

> I wish to use my cable wiring (75 ohms) to receive and transmit (less
> than 5 watts) and attach a Lan to (not necessarily at the same time).
> As such, I need to convert 50 ohms to 75 and vice versa.
>
> Does anyone have plans, a URL or guidance regarding constructing this
> type of impedance matching transformer?
>
> Gary
> VA3GH
>

Date: Thu, 16 Aug 2001 09:17:14 +0100

From: "G3MFJ" <g3mfj@btinternet.com>
To: <kd3em@velocity.net>, "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [105017] Re: New Book....:)
Message-ID: <00c001c1262b\$ee755280\$02010080@graham>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi

As I understand it - it is all direct "lifts" (scans) from the G-QRP magazine - Sprat. If you have copies of the back numbers - either the xerox copies that Bill N8ET did (still does?), or the CD from Germany, then you have it all already.

72/3

Graham
G3MFJ

----- Original Message -----

From: David Gilson

Subject: New Book....:)

Did you know that there is a New QRP book on the market!. It's call the "Low Power Scrapbook". You can get it from the ARRL, but it is from the RSGB and the G-QRP Club. I have found that the print is a little on the small size and a couple of the drawings a little hard to read or maybe its a sign of old age hi hi. It is full of 320 pages of good stuff, a few articles from "How to get Started in QRP" and some from the G-QRP Club "Antenna Handbook". On the scale of one to ten, I'll give it a nine just mainly due to the small print.
Best 72's to all.

Dave
KD3EM
ARCI#8126
FPQRP#305
FISTS#8460

Date: Thu, 16 Aug 2001 10:39:26 +0200
From: DK3RED@t-online.de (Ingo DK3RED)

To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [105018] Re: New Book....:)
Message-ID: <009d01c1262f\$1579b260\$779101d9@ingo>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello Graham,

> As I understand it - it is all direct "lifts" (scans) from the G-QRP
> magazine - Sprat. If you have copies of the back numbers - either the
> xerox copies that Bill N8ET did (still does?), or the CD from Germany,
> then you have it all already.

That is true, but you can read a book better in the bed or in the garden
than a CD. ;o))

72 de Ingo, DK3RED (Don't forget: the fun is the power !)

eMail: dk3red@qsl.net - homepage: www.qsl.net/dk3red

Date: Thu, 16 Aug 2001 07:11:52 -0400
From: Bill Coleman <aa4lr@arrl.net>
To: "Bill Coleman" <aa4lr@arrl.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105019] Re: Are knots bad for antennas?
Message-ID: <20010816111251.ENLL12477.imf08bis.bellsouth.net@[192.168.0.20]>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 8/14/01 1:48 AM, Bill Coleman at aa4lr@arrl.net wrote:

>On 7/30/01 3:30 PM, Goran Hosinsky at hosinsky@jet.es wrote:
>
>>On wire antennas I often make bow-knots to connect supporting lines etc.
>>
>>My portable antennas can have many knots as I split them up for use
>>on different bands. Is this bad practice?
>
>I used to repair broken wire antennas by making a knot (to support the
>wire, then connecting the free ends.
>
>It does introduce an impedance bump, but at HF, it is particularly
>significant.

I need to pay closer attention - I meant *IN*significant.

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net

Quote: "Not within a thousand years will man ever fly!"

-- Wilbur Wright, 1901

Date: Thu, 16 Aug 2001 05:39:10 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <schoon@amgt.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105020] RE: Got IT!
Message-ID: <Pine.LNX.4.33.0108160536060.2557-100000@localhost.localdomain>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Nope. It appears to be due to a narrowing in the vertical plane and in a direction about 30 degrees above the horizon according to MININEC.

On Wed, 15 Aug 2001 schoon@amgt.com wrote:

> It sounds like you're getting the 8 DBi of gain, pointing straight up!!
> Is that correct??
>
> .mark
>
> >-----
> >From: Karl F. Larsen[SMTP:k5di@zianet.com]
> >Sent: Wednesday, August 15, 2001 3:55 PM
> >To: Low Power Amateur Radio Discussion
> >Subject: Got IT!
> >
> >
> > Fooled around with MMANA which uses MININEC to calculate far
> >fields and then you can list the gain from that. Here is what I found out.
> >I simulated a 20 meter dipole 20 meters above a real ground and got a gain
> >of 7.22 DBi. Then I used a perfect ground and got a gain of 7.80 DBi which
> >was what I quoted in earlier messages as 8 DBi.
> >
> > Then I simulated the 20 meter dipole in free space and wonder of
> >wonders I got 2.13 DBi which is the magic number.
> >
> > So the FACT is that for some good reasons the isotropic radiator

> >and the dipole in free space, neither of which exist, are related by the
> >fact that the dipole is 2.13 DB stronger than the isopole radiator.

> >

```
> > When you put the dipole close to a ground, like a wavelength, it
> > has a more compact beam that shows gain of like 8 DBi.
```

> >

> >--

> >Yours Truly,

> >

> > - Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

> >

> >

> >

> >

>

>

— —

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Thu, 16 Aug 2001 06:10:15 -0600 (MDT)

From: "Karl F. Larsen" <k5di@zianet.com>

To: <grp-1@lehigh.edu>

Subject: [105021] Low dipole

Message-ID: <Pine.LNX.4.33.0108160554560.2557-100000@localhost.localdomain>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

I have been using the shortened 20 meter dipole built after the plans of W3FF in fox hunts and had wonderful success. It hears real good and I have got good signal reports. I have the antenna on a painters handle about 10 feet high.

I simulated this with MMANA and the results are that it should work good! At a 3 meter height above a real flat earth the gain is still 7 DBi at about 45 degrees peak vertical angle. It sure still looks like a dipole and my and Budd, W3FF experiance is it works very good.

MMANA does have a problem known to MININEC. As you get close to a real ground the simulator gives un-reasonable gains over an isotropic. But the beam shape is right so you can see what the feed point impedance will be and whether the power is going in a useful direction.

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Thu, 16 Aug 2001 08:31:56 EDT
From: W0rw@aol.com
To: qrp-l@lehigh.edu
Subject: [105022] Sierra 60M Band Module (Rev. A)
Message-ID: <cc.19774f0b.28ad173c@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

i haven't had too much time to work on my 60M Sierra Band Module but here are my preliminary calculations... mostly extrapolated.

The Xtal (X8) i chose was a 13.20MHz to give 5.2 to 5.35 Mhz coverage, (a 13.25 Mhz xtal would give all of the proposed band, 5.25 to 5.4 Mhz but the dial would read zero at 5.25, using the 13.2 xtal the dial will read zero at 5.20 Mhz).

The PMO frequencies will be 10.115 to 10.265 MHz w/13.20 Mhz xtal.

C1,2,33,36,64,66 and 70 all standard 9-50 pf variables

All these values below are just extrapolated...

C47,49 are 470pf

C48 is 910 pf

C32,35 about 50pf

C34,65 is 5pf

L1 about 25uH using an FT37-61 core

T1 secondary same as L1, primary about 2T #26 on FT37-61 core

L3,4 about 13.5 uH using a T37-2 core

L5,6 about 1.8uH using a T37-2

L8,9 about 5.2 uH using a T37-2

(The output low pass filter L5,6,C47,48,49, cutoff is 6 MHz).

Has anyone gone any further than this ?

i don't have the cores and variable caps to build it yet.

Paul

w0rw@aol.com

Date: Thu, 16 Aug 2001 09:24:39 -0400
From: "Mike Czuhajewski" <wa8mcq@erols.com>
To: <qrp-l@lehigh.edu>
Cc: <k3tks@u1.abs.net>, <wa8mcq@erols.com>
Subject: [105023] QRPer N3CDR a silent key
Message-ID: <00b601c12656\$cdae9c20\$8934fea9@l8a3h1>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The Metro section of the Washington Post (which is a local paper for me) has a two page obituary section, and it usually includes a few articles with LARGE titles about prominent people who have passed away. (And in the Washington DC area there are a lot of them.) When I glanced at those in the 15 August edition I was surprised to see the name of a local QRPer, Herbert Ley Jr, also known as N3CDR. (And his obit got 12 column inches.) While not too well known in the QRP world now, old timers may recognize the call. He's had a few articles in the QRP press over the years, as well as some QST articles about technical topics.

I knew him from the days when I worked part time at Maryland Radio Center in Laurel (a ham store, now closed), when it was a popular Saturday gathering spot for local QRPers. We talked about homebrewing quite a bit and he was pretty knowledgeable about such things. I was told that he was a retired doctor, but that's all I knew. According to the article he worked in that career field as an Army officer (retiring as a LT COL), was chairman of microbiology related departments at Harvard and George Washington University, spent a couple of years as director of the Food and Drug Administration's Bureau of Medicine, then another 18 months as the commissioner of the FDA (!). Yup, that's enough to rate a major writeup :-)

All I had known was that he was a QRPer and very interested in and knowledgeable about technical matters, and a real gentleman. He will be missed.

73 and queue our pea DE WA8MCQ

Date: Thu, 16 Aug 2001 09:12:13 -0500
From: "James P. Osburn, P.E." <j.p.osburn@ieee.org>
To: "List; QRP, QRP Mailing List" <qrp-l@lehigh.edu>
Subject: [105024] WBR WD9EYB Photos
Message-ID: <000501c1265d\$8941f620\$56e9a0ce@aaacomputer>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have finished my WBR receiver and it works.
Here is a link to photos of my work.
<http://lightning.qrp.com/~wd9eyb/wbr/photos/>

Jim, WD9EYB

Reply-To: j.p.osburn@ieee.org

Date: Thu, 16 Aug 2001 10:25:43 EDT
From: MertNellis@aol.com
To: qrp-l@lehigh.edu
Subject: [105025] Re: Fw: PSK-31 Expedition to the Boundary Waters
Message-ID: <a7.12637250.28ad31e7@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

At 09:14 PM 8/12/2001 -0500, Don KCOGMF wrote:

> >Every year I go to the Boundary Waters of northern Minnesota to
> >canoe and fish. When I can, I take a small cw
>rig...(snipola)...Technical suggestions >are welcome!
> >73,
> >Don Snider
> >N3MK

....and don't forget the water filter so you don't get "beaver fever".
What dates will you be there, So we can look for you?
and what bands and freqs will you operate?
I have a QRP "hide-out" about half way from MSP/STP to Duluth and only 8 mi.
off interstate 35 and am there most of the time. Want a coffee stop?
73 Mert W0UFO MNQRP

Date: Thu, 16 Aug 2001 10:01:17 -0500
From: "James P. Osburn, P.E." <j.p.osburn@ieee.org>
To: "List; QRP, QRP Mailing List" <qrp-l@lehigh.edu>
Subject: [105026] WBR WD9EYB Notes

Message-ID: <001301c12664\$7fafd760\$56e9a0ce@aaaacomputer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Here are some notes about my WBR receiver.
See the article in August QST for more information.
Also see the corrections published in September QST.

My receiver didn't have the sensitivity that I wanted, I want to use it with short, high impedance, antennas. I increased the sensitivity by adding impedance at Z1. I used a T-37-6 torroid with 4 turns of number 22 wire. My choice for that was arbitrary. My receiver is now adequately sensitive.

My receiver tunes low in frequency, about 6860 kHz to 7170 kHz. AA3SJ also reported his receiver tuning low. I used Manhattan style construction and so did AA3SJ. Maybe since everything is closer to the ground plane there's additional capacitance that causes it to tune low. Someday I might fiddle with it, perhaps by putting something like 0.001 uF in series with C7.

The enclosure is made of 0.050" thick, double sided, paper-based, phenolic PCB material. I can cut that stuff much easier than I can cut FR4 with my snips. A friend once gave me a nice big sheet of it so I have a good supply of it. It's a funny blue color. Small enclosures made from it are plenty sturdy but large ones are too flexible. The cover is Contact paper. I printed the labels on label paper on my printer.

This was the first time I used Manhattan style construction. I used my Radio Shack nibbler tool to make the islands. I made the islands from FR4 PCB material since the stuff I made the enclosure from made islands that were too crumbly. For me it was slower building Manhattan style than ugly style, but that might be because I'm new at it. I did plan the layout ahead of building, but the layout changed as I built.

At first I was going to build the circuit on a separate PCB. Then I built the enclosure and I was looking at it. All of that copper looked attractive so I went ahead and built the circuit on the enclosure.

When adjusting the unit I found that the base current to Q1 can be set high enough so that it oscillates at lots of different frequencies instead of just the desired one. I used my oscilloscope on the emitter of Q1 to watch the oscillation while I adjusted R6, the regen

preset pot, to make sure the thing only oscillated at one frequency and went in and out of oscillation within the range of the regen control.

I measured some DC voltages. My battery was 9.36 V when the unit was off and 9.30 V when the unit was on. Going into U1 I had 7.58 V. Coming out of U1 I had 4.92 V. The collector of Q1 was 4.85 V, the emitter 0.69 V, and the base varied about 1.3 V. The drain of Q2 was 4.54 V, the gate 0 V, and the source 3 V.

Last night I attended a weekly ham group that meets here and I set up my WBR receiver. We were meeting outside. I used about 33 feet of number 26 wire held up by a fishing pole with the top flipped into some trees. I also used some battery operated computer speakers so the others in the group could hear too. We could nicely copy CW, SSB and SW broadcasts. We could also copy some weird hate group broadcast that was below 7 MHz. But it was an enjoyable evening playing with and showing off my little receiver.

Sunday I'm attending the Lafayette, Indiana, hamfest if anyone would like to get together and enduring me showing off and bragging about my little receiver. I'm also hoping there's a QRP forum at the Fort Wayne hamfest in November where I can do some more showing off and bragging. This will also be my winning entry in the WVARA home-brew contest in October.

Thanks,

Jim, WD9EYB

Reply-To: j.p.osburn@ieee.org

Date: Thu, 16 Aug 2001 11:48:16 -0400
From: "Tim A. King Jr." <iflyos@hotmail.com>
To: qrp-l@Lehigh.EDU
Subject: [105027] QRP rigs
Message-ID: <F72PDSnV1V9s8zvivee00009812@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Guys,

I am new to the list, and a new Ham as well. (Only a lowly tech, but working on the upgrade to General as soon as I can get the code down.) In

the mean time, Thanks to my elmers and my YL's father I have developed a great interest in QRP.

My question is as follows: I would like to build a fairly simple QRP CW rig of some sort. I am asking for suggestions from the group as to what would be a good place to start. I have an electronics background (I was a 68L (avionics tech) in the Army) but I have never done any rf designing. I was hoping to find something that to build that parts would not be impossible to come by, and I was looking at 40 meters and up, because I live in a CCR apartment, and all my antennas have to be in the attic. (Not alot of room up there...)

Any suggestions would be appreciated!

73 & gud QRP,

Tim A. King, Jr.
KG4MQD
Safety Officer, Hobby Park R/C Aircraft Club
Winston Salem, NC
AMA# 578668

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Thu, 16 Aug 2001 09:02:27 -0700
From: Phil Wheeler <w7ox@earthlink.net>
To: iflyos@hotmail.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [105028] Re: QRP rigs
Message-ID: <3B7BEE93.D903FF6D@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

"Tim A. King Jr." wrote:

>

> My question is as follows: I would like to build a fairly simple QRP CW rig
> of some sort. I am asking for suggestions from the group as to what would
> be a good place to start. I have an electronics background (I was a 68L
> (avionics tech) in the Army) but I have never done any rf designing. I was
> hoping to find something that to build that parts would not be impossible to

> come by, and I was looking at 40 meters and up, because I live in a CCR
> apartment, and all my antennas have to be in the attic.

Best place to start would be a kit .. then parts are not an issue, and most can be had with a case .. avoiding the dreadful (to me!) mechanical tasks.

An excellent and not difficult kit is the Elecraft K1. You can build it with two bands of your choice; mine is 40/20. But the K1 is relatively expensive (but worth every penny IMHO). It will also run full QRP power of 5 watts, an advantage with antenna limitations. See:

<http://www.elecraft.com>

There are sources of excellent single band kits. My first was the NC-40A (40 meters), a NorCal kit which was then commercialized by Wilderness Radio:

<http://www.fix.net/jparker/wild.html>

I also highly recommend the kits from Small Wonders Labs, and there is quite a variety of them:

<http://www.smallwonderlabs.com/>

There are other kits out there (e.g., Oak Hills) which are highly regarded, but I have no personal experience with them.

Good luck, and welcome aboard, Tim.

73, Phil W70X

Date: Thu, 16 Aug 2001 12:13:35 -0400
From: "Brian" <brian@iquest.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105029] Re: QRP rigs
Message-ID: <009b01c1266e\$6721f020\$3d05080a@cincom.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

The Pixie II is a neat little rig. You can build it for 40m, and it's a transceiver.

See:

<http://www.qsl.net/wa6otp/pixie.htm>

<http://www.qsl.net/kl7aqc/frpix.html>

<http://www.kenneke.com/~jon/pixie/>

72

----- Original Message -----

From: "Tim A. King Jr." <iflyos@hotmail.com>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Sent: Thursday, August 16, 2001 11:48 AM

Subject: QRP rigs

> Guys,

> I am new to the list, and a new Ham as well. (Only a lowly tech, but
> working on the upgrade to General as soon as I can get the code down.) In
> the mean time, Thanks to my elmers and my YL's father I have developed a
> great interest in QRP.

>

> My question is as follows: I would like to build a fairly simple QRP CW
rig

> of some sort. I am asking for suggestions from the group as to what would
> be a good place to start. I have an electronics background (I was a 68L
> (avionics tech) in the Army) but I have never done any rf designing. I
was

> hoping to find something that to build that parts would not be impossible
to

> come by, and I was looking at 40 meters and up, because I live in a CCR
> apartment, and all my antennas have to be in the attic. (Not alot of room
up
> there...)

>

> Any suggestions would be appreciated!

>

> 73 & gud QRP,

>

> Tim A. King, Jr.

> KG4MQD

> Safety Officer, Hobby Park R/C Aircraft Club

> Winston Salem, NC

> AMA# 578668

>

>

> -----

> Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>
>
>

Date: Thu, 16 Aug 2001 12:23:48 EDT
From: NM5Mike@aol.com
To: qrp-1@lehigh.edu (Low Power Amateur Radio Discussion)
Subject: [105030] KPC 3 TNC has been Sold
Message-ID: <102.7837b09.28ad4d94@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

My KPC 3 TNC has been Sold.

Thanks,

Eric NM5M

Date: Thu, 16 Aug 2001 11:42:40 -0500
From: "Coleman Callaway" <coleman@callaways.org>
To: <qrp-1@Lehigh.EDU>
Subject: [105031] FS: OHR 400 with keyer
Message-ID: <000101c12672\$778ad900\$066fa8c0@tcac.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

For sale: Oak Hills research OHR 400 with built-in keyer, power cord and manual...\$220.

I will pay UPS shipping in CONUS.

Coleman Callaway, N4IM
Georgetown, TX

Date: Thu, 16 Aug 2001 09:50:35 -0700
From: Bob Nielsen <nielsen@oz.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [105032] Re: 75 to 52 ohms
Message-ID: <20010816095035.B31236@oz.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

True, but the NICs themselves are not 50 ohms, but high impedance, so they do not load the cable. If you use 75 ohm cabling with 75 ohm terminations, it should also work (I suppose the tees ought be 75 ohms also, but don't know if those exist). The point is that you want to minimize any reflections of the data stream.

On Wed, Aug 15, 2001 at 01:10:01AM -0700, Kevin Asato wrote:

> What device(s) are you connecting to the LAN? Last I checked, all coax
> cabling for 10Base-5 and 10Base-2 LANs is 50ohm using RG-8 and RG-58 cabling
> with 50ohm terminators at the ends of the circuit.

>
> Kevin K Asato
> KC6POB
> ADC PairGain Tech Support
> 800.638.0031 / 714.730.3222 (tel)
> 714.730.2400 (fax)

>
> ----- Original Message -----
> From: Gary Halpern <gary.halpern@sympatico.ca>
> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
> Sent: Wednesday, August 15, 2001 10:31 AM
> Subject: 75 to 52 ohms

>
>
> > I wish to use my cable wiring (75 ohms) to receive and transmit (less
> > than 5 watts) and attach a Lan to (not necessarily at the same time).
> > As such, I need to convert 50 ohms to 75 and vice versa.

> >
> > Does anyone have plans, a URL or guidance regarding constructing this
> > type of impedance matching transformer?

> >
> > Gary
> > VA3GH
> >

--

Bob Nielsen, N7XY
Bainbridge Island, WA
IOTA NA-065, USI WA-028S

nielsen@oz.net
<http://www.oz.net/~nielsen>

Date: Thu, 16 Aug 2001 12:51:31 -0400
From: "Lee S. Mairs" <lmairs@cox.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [105033] Re: QRP rigs
Message-ID: <008e01c12673\$b39eae20\$6401a8c0@cox.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I don't think you can beat the smallwonderlabs kits.
(<http://www.smallwonderlabs.com/>) I'm having a ball with my 20 meter
SW20+ transceiver. Not much money, plus, Dave is very patient and helpful
if something goes wrong.
73 de Lee, KM4YY

The next best thing to knowing something is knowing where to find it.
-- Samuel Johnson

----- Original Message -----
From: "Phil Wheeler" <w7ox@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Thursday, August 16, 2001 12:02 PM
Subject: Re: QRP rigs

>
>
> "Tim A. King Jr." wrote:
> >
> > My question is as follows: I would like to build a fairly simple QRP CW
rig
> > of some sort. I am asking for suggestions from the group as to what
would
> > be a good place to start. I have an electronics background (I was a 68L
> > (avionics tech) in the Army) but I have never done any rf designing. I
was
> > hoping to find something that to build that parts would not be
impossible to
> > come by, and I was looking at 40 meters and up, because I live in a CCR
> > apartment, and all my antennas have to be in the attic.

>
> Best place to start would be a kit .. then parts are not an issue, and
> most can be had with a case .. avoiding the dreadful (to me!) mechanical
> tasks.
>
> An excellent and not difficult kit is the Elecraft K1. You can build it
> with two bands of your choice; mine is 40/20. But the K1 is relatively
> expensive (but worth every penny IMHO). It will also run full QRP power
> of 5 watts, an advantage with antenna limitations. See:
>
> <http://www.elecraft.com>
>
> There are sources of excellent single band kits. My first was the NC-40A
> (40 meters), a NorCal kit which was then commercialized by Wilderness
> Radio:
>
> <http://www.fix.net/jparker/wild.html>
>
> I also highly recommend the kits from Small Wonders Labs, and there is
> quite a variety of them:
>
> <http://www.smallwonderlabs.com/>
>
> There are other kits out there (e.g., Oak Hills) which are highly
> regarded, but I have no personal experience with them.
>
> Good luck, and welcome aboard, Tim.
>
> 73, Phil W7OX

Date: Thu, 16 Aug 2001 12:51:07 -0400
From: "Brian" <brian@iquest.net>
To: <iflyos@hotmail.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [105034] Re: QRP rigs
Message-ID: <002101c12673\$a55218c0\$3d05080a@cincom.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

If you are a ARRL member, go to this website:

<http://www.arrl.org/members-only/tis/info/pdf/0012028.pdf>

Great article on six different QRP kits.

----- Original Message -----

From: "Tim A. King Jr." <iflyos@hotmail.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Thursday, August 16, 2001 11:48 AM

Subject: QRP rigs

> Guys,

> I am new to the list, and a new Ham as well. (Only a lowly tech, but
> working on the upgrade to General as soon as I can get the code down.) In
> the mean time, Thanks to my elmers and my YL's father I have developed a
> great interest in QRP.

>

> My question is as follows: I would like to build a fairly simple QRP CW
rig

> of some sort. I am asking for suggestions from the group as to what would
> be a good place to start. I have an electronics background (I was a 68L
> (avionics tech) in the Army) but I have never done any rf designing. I
was

> hoping to find something that to build that parts would not be impossible
to

> come by, and I was looking at 40 meters and up, because I live in a CCR
> apartment, and all my antennas have to be in the attic. (Not alot of room
up

> there...)

>

> Any suggestions would be appreciated!

>

> 73 & gud QRP,

>

> Tim A. King, Jr.

> KG4MQD

> Safety Officer, Hobby Park R/C Aircraft Club

> Winston Salem, NC

> AMA# 578668

>

>

>

> -----
> Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

>

>

Date: Thu, 16 Aug 2001 16:54:12 +0000

From: Dragon Singer <WM-Scace@wiu.edu>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [105035] Foxii notices
Message-ID: <5.1.0.14.0.20010816165230.021fb3e8@pop3.wiu.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hi Gang,
Wayne K9DI es Sequoia here, I seem to have missed the posts for
tonight's foxii, would one of you forward them to me please? Tnx in advance
72 es 00

Respectfully and Sincerely Yours,

Wayne M. Scace

k9di@arrl.net
LICQ# 315313
FISTS# 4409
QRP-L# 2313
FPQRP-L# 217
SOC# 452
ARS No. 1,082

Date: Thu, 16 Aug 2001 13:08:52 -0400
From: John Wagner <john@wagner-usa.net>
To: iflyos@hotmail.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105036] Re: QRP rigs
Message-ID: <3B7BFE24.D67B5353@wagner-usa.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello Tim,

Congratulations on getting your Tech license and welcome to QRP
operating!

I see a number of people have replied to you about which kit to buy and
all of the suggestions have been right on the mark.

Someone suggested Small Wonder Labs, <http://www.smallwonderlabs.com> -
and this is my recommendation to you as well. The SW+ series of radios

are EXCELLENT kits, fairly easy to build and come with complete instructions. You also get Dave Benson, K1SWL standing behind the radio and anyone here who has had contact with Dave will attest to the fact that his support is second to none. I think the price of this kit is still \$55 delivered to your door - you can't beat that. Dave also offers an enclosure kit with knobs and all the stuff you need to finish the radio as well (don't know the price).

As for the band, I recommend you go with 20m or 40m, with a slight preference to 20m. 20m is open most parts of the day to somewhere. 30m is also a good choice, but if I had only one rig it would be on 20m.

Again, congrats on getting your ticket. Don't put off the studying for General and the CW practice! Keep us up to date on your progress.

73 de John, N1QO

"Tim A. King Jr." wrote:

>
> Guys,
> I am new to the list, and a new Ham as well. (Only a lowly tech, but
> working on the upgrade to General as soon as I can get the code down.) In
> the mean time, Thanks to my elmers and my YL's father I have developed a
> great interest in QRP.
>
> My question is as follows: I would like to build a fairly simple QRP CW rig
> of some sort. I am asking for suggestions from the group as to what would
> be a good place to start. I have an electronics background (I was a 68L
> (avionics tech) in the Army) but I have never done any rf designing. I was
> hoping to find something that to build that parts would not be impossible to
> come by, and I was looking at 40 meters and up, because I live in a CCR
> apartment, and all my antennas have to be in the attic. (Not alot of room up
> there...)
>
> Any suggestions would be appreciated!
>
> 73 & gud QRP,
>
> Tim A. King, Jr.
> KG4MQD
> Safety Officer, Hobby Park R/C Aircraft Club
> Winston Salem, NC
> AMA# 578668
>
> _____
> Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

--

John Wagner - john@wagner-usa.net
Web page: <http://www.neknetwork.com>

Date: Thu, 16 Aug 2001 12:37:51 -0700 (PDT)
From: Philip Karras <ke3fl@yahoo.com>
To: qrp-1@lehigh.edu
Subject: [105037] Help a Ham? Scanner Manuals que.
Message-ID: <20010816193751.59775.qmail@web11605.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Would any of you know where/how I could get the user's manual, & possibly the service manual, for the Regency MX3000 scanner?

A friend of mine (Joe/WA30HI) who had a stroke has this radio and it seems to be going on the fritz. We'd like to fix it. (He does very well with things he had before his stroke, but has a very difficult time learning new radios.)

Thanks for any help you can offer!

=====
Phil Karras, KE3FL
Email: ke3fl@arrl.net
Web: <http://www.qsl.net/ke3fl>

Do You Yahoo!?
Make international calls for as low as \$.04/minute with Yahoo! Messenger
<http://phonecard.yahoo.com/>

Date: Thu, 16 Aug 2001 13:37:25 -0600
From: Jeff Chambers <jeff.chambers@mindspring.com>
To: unlisted-recipients;; (no To-header on input)
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [105038] Re: QRP rigs
Message-ID: <3B7C20F5.3A67E9A2@mindspring.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

>Guys,
> I am new to the list, and a new Ham as well. (Only a lowly tech, but
> working on the upgrade to General as soon as I can get the code down.)In > the
mean time, Thanks to my elmers and my YL's father I have developed a
> great interest in QRP. <snip>

Hello Tim-

This is where I started.

<http://www.arrl.org/news/features/1999/11/15/1/>

<http://www.arrl.org/news/features/1999/11/15/1/qrpkit.pdf>

I chose the Emtech NW-20 and am very pleased. They also have the ZM-2
QRP tuner, which is very handy and a fairly easy build too.

Good luck, and enjoy QRP!

72,
Jeff Chambers / KK7MQ

Date: Thu, 16 Aug 2001 16:16:31 -0400
From: "George Osier" <gosier@twcnny.rr.com>
To: <qrp-l@lehigh.edu>
Subject: [105039] Fw: #61 and #62 D68C and KG4IZ !!!
Message-ID: <000c01c12690\$579652a0\$fc704342@twcnny.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----
From: "George Osier" <gosier@twcnny.rr.com>
To: <qrp@yahoogroups.com>
Sent: Thursday, August 16, 2001 4:10 PM
Subject: #61 and #62 D68C and KG4IZ !!!

> Hello All !!!!
>
> Got # 61 and #62 in the mail today !!!
>
> D68C , 500 MW , CW , 10 METERS
> KG4IZ , 700 MW , CW , 10 METERS

>
> 73s
> George , N2JNZ / QRPp
>

Date: Thu, 16 Aug 2001 16:11:05 -0400
From: "Hare,Ed, W1RFI" <w1rfi@arrl.org>
To: "'iflyos@hotmail.com'" <iflyos@hotmail.com>, Low Power Amateur Radio
Discussion <qrp-l@Lehigh.EDU>
Subject: [105040] RE: QRP rigs
Message-ID: <125490A005E3D3118C9C00805FC743CC023B36E8@KAHLESS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Hi, Tim,

Welcome to QRP. There are number of QRP rigs featured on the ARRL Web page
at:

<http://www.arrl.org/tis/info/qrphome.html>
<http://www.arrl.org/tis/info/qrpprojs.html>

a number of "reviews" of some of the the various QRP-rig kits that are/were
available is found at:

<http://www.arrl.org/tis/info/qrpkits.html>

(Note for the squeamish -- some of these are available on the ARRL
members-only page. If any of you all are new hams, or new to HF, and want a
copy of the members-only articles, email me and I will send it to you.)

73,
Ed Hare, W1RFI
ARRL Lab
225 Main St
Newington, CT 06111
Tel: 860-594-0318
Internet: w1rfi@arrl.org
Web: <http://www.arrl.org/tis>

> -----Original Message-----
> From: Tim A. King Jr. [mailto:iflyos@hotmail.com]

> Sent: Thursday, August 16, 2001 11:48 AM
> To: Low Power Amateur Radio Discussion
> Subject: QRP rigs
>
>
> Guys,
> I am new to the list, and a new Ham as well. (Only a
> lowly tech, but
> working on the upgrade to General as soon as I can get the
> code down.) In
> the mean time, Thanks to my elmers and my YL's father I have
> developed a
> great interest in QRP.
>
> My question is as follows: I would like to build a fairly
> simple QRP CW rig
> of some sort. I am asking for suggestions from the group as
> to what would
> be a good place to start. I have an electronics background
> (I was a 68L
> (avionics tech) in the Army) but I have never done any rf
> designing. I was
> hoping to find something that to build that parts would not
> be impossible to
> come by, and I was looking at 40 meters and up, because I
> live in a CCR
> apartment, and all my antennas have to be in the attic. (Not
> alot of room up
> there...)
>
> Any suggestions would be appreciated!
>
> 73 & gud QRP,
>
> Tim A. King, Jr.
> KG4MQD
> Safety Officer, Hobby Park R/C Aircraft Club
> Winston Salem, NC
> AMA# 578668
>
>
>

> Get your FREE download of MSN Explorer at
> <http://explorer.msn.com/intl.asp>
>

Date: Thu, 16 Aug 2001 20:54:43 +0100
From: Larry Cahoon <lejek@erols.com>
To: qrp-l@lehigh.edu
Subject: [105041] The Power Management Contest
Message-ID: <5.0.2.1.0.20010816205249.00a23ec0@pop.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

For those who played in the piggyback power management contest to the NA QSO party earlier this month this is a reminder to send in you "logs". Logs is an overstatement. The info I need it up at <http://www.qsl.net/wd3p/qrp/pwrcontest/pwrcontest.htm> Due date is the end of August.

Tnx and 73 de Larry.....WD3P in MD
<http://www.qsl.net/wd3p/>

Date: Thu, 16 Aug 2001 17:03:48 -0400
From: Ed Kessler <edkess@pa.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Cc: "Eastern PA QRP Club" <epaqrp-l@Lehigh.EDU>
Subject: [105042] FS: Ten Tec Filters & Speech Processor
Message-ID: <5.0.2.1.0.20010816165743.00a49730@mail.pa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I have the following Ten Tec accessories for sale:

Crystal Filters (used but in excellent condition):
#217 500 Hz 8 Pole Ladder Filter, 9 MHz (for 562 / 563/ 564 narrow position; 546)
#218 1.8 KHz 8 Pole Ladder Filter, 9 MHz (for 562 / 563/ 564 narrow position; 546)
\$70.00 plus \$4 shipping.

Model 234 Speech Processor
Used with the earlier Omni series. Works perfectly, but the previous owner scratched his name on the front panel (Duh!). Otherwise in very nice condition with only minor scuffs on the enclosure.
\$35 plus \$5 shipping.

Ed AA3SJ

Ed Kessler AA3SJ
950 Woodside Station Road
Millersburg, PA 17061

website: <http://www.qsl.net/aa3sj>

Date: Thu, 16 Aug 2001 17:19:06 -0400
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: ".QRP-L Discussion Group" <QRP-L@Lehigh.edu>
Cc: ")W.D.(Doc)Lindsey/K0EVZ" <70511.3041@compuserve.com>
Subject: [105043] SMK-1 Kits shipped yet?
Message-ID: <200108161719_MC3-DCA4-BE05@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

Gang:

I am in a quandary. Ordered one of the SMK-1 kits several weeks ago, and= sent a bank money order. But I never received the kit, and frankly cannot recall just who was selling them (believe I got one of the very last kits= available). Can anyone help? Many thanks. BTW, GL in the FOX hunts tonight. Here's hoping we have great propagation for them.

73,
--Doc/K0EVZ

Date: Thu, 16 Aug 2001 17:42:11 -0400
From: Ken Newman <N2CQ@citnet.com>
To: epaqrp-l@lehigh.edu, QRP-L@lehigh.edu, njqrp@njqrp.org, n9avg@amsat.org
Subject: [105044] [CONTEST}QRP Contest Calendar - Aug 16/31
Message-ID: <3.0.6.32.20010816174211.009237b0@mail.citnet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

~~~~~

## QRP CONTEST CALENDAR

August 16-31, 2001

~~~~~

Summer Fox Hunts - 20 M CW QRP - Fri 0200z - July & August

Details: <http://www.mtechnologies.com/cqc/sfox/index.htm>

~~~~~

Summer CUB Fox Hunts - 20M CW QRP - Wed 0200z - July 4 thru Sep 5

Details: <http://www.wulfden.org/SummerCubFox/>

~~~~~

SARTG RTTY Contest

Aug 18 - 0000z to 0800z

Aug 18 - 1600z to 2400z

Aug 19 - 0800z to 1600z

Rules: <http://home.online.no/~janalme/htmlrules/sartg.html>

~~~~~

### North American QSO Party (SSB)

Aug 18 - 1800z to Aug 19 - 0600z

Rules:

<http://www.ncjweb.com/index.php3?leftcol=contestmenu&rightcol=naqprules1>

~~~~~

NJ QSO Party (CW/SSB)

Aug 18 - 2000z to Aug 19 - 0700z

Aug 19 - 1300z to Aug 20 - 0200z

Rules: <http://www.sk3bg.se/contest/njqp.htm>

~~~~~  
Colorado QRP Club - Summer QSO Party (SSB/CW) \*\*\* QRP CONTEST! \*\*\*

Aug 19 - 1800z to 2359z

Rules: <http://home.online.no/~jana1me/htmlrules/cqcsummer.html>  
~~~~~

TOEC WW Grid Contest (CW)

Aug 25 - 1200z to Aug 26 - 1200z

Rules: <http://home.online.no/~jana1me/rules/toecgrid.txt>
~~~~~

Slovenia Contest Club RTTY Championship

Aug 25 - 1200z to Aug 26 - 1200z

Rules: <http://www.sk3bg.se/contest/sccrychs.htm>  
~~~~~

W/VE Island Contest

Aug 25 - 1600z to Aug 26 - 2359z

Rules: <http://www.eng.mu.edu/usislands/usvetest.html>
~~~~~

Hawaii QSO Party (CW/SSB) ... QRP Category

Aug 25 - 1600z to Aug 26 - 2200z

Rules: <http://home.online.no/~jana1me/htmlrules/qsohi.html>  
~~~~~

Ohio QSO Party (CW/SSB) ... QRP Category

Aug 25 - 1600z to Aug 26 - 0400z

Rules: <http://www.qsl.net/mrrc/oqp.html>


~~~~~  
South Dakota QSO Party (CW/SSB)... QRP Category

Aug 25 - 1600z to Aug 26 - 2200z

Rules: <http://home.online.no/~janalme/rules/qsosd.txt>  
~~~~~

BUBBA Summer QRP Sprint *** QRP CONTEST! ***

Aug 25 - 1800z to 2200z

Rules: <http://www.extremezone.com/~nk7m/>
~~~~~

Anyone may use this "QRP Contest Calendar" for your website, newsletter,  
e-mail list or other media as you choose.  
(Include a credit to the source of this material of course.)

72 de

Ken Newman - N2CQ

N2CQ@ARRL.NET      <http://www.NJQRP.org>  
                     <http://www.N3EPA.org>  
                     <http://www.qsl.net/cqrp/contests.html>

-----  
Date: Thu, 16 Aug 2001 16:04:11 -0600  
From: "Marshall Emm" <mgemm@mtechnologies.com>  
To: qrp-1@LEHIGH.EDU  
Subject: [105045] FOX: Results After Week 7 (Hunt 14)  
Message-ID: <3B7BEEFB.14943.6F3084@localhost>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT

The results are in, and have been posted at <http://www.cqc.org/sfox> .

And interesting they are.... on the one hand I see the number of ops who have perfect scores, and think it must be too easy. On the other hand, I see the Big Dawgs so far out in front of the other other teams that they are pretty much untouchable, so obviously it's not so easy for some team members [g].

I also find it interesting to note that there are over 240 hounds who have earned at least one pelt-- yet no fox has worked more than half of them in one hunt. The best contester I know, Larry N2WW, who not entirely coincidentally holds the record for most Qs in a run this summer, and the ALL TIME record for QSO's in any single fox hunt (ok, enough with his "credentials").... says he could theoretically 240-300 in the two hour hunt. He's doing his second run tonight and I suspect his first 45 minutes or so will bear that out.

Personally I think playing with Fox Hunt numbers is a lot more interesting and useful than trying to conclude anything from FCC database statistics [g].

Good luck to both foxes and all hounds tonight, and may the Fox be with you...

73

Marshall Emm

N1FN/VK5FN

n1fn@MorseX.com

Morse Express and Oak Hills Research

"Everything for the Morse Enthusiast"

<http://www.MorseX.com>

<http://www.ohr.com>

(303)752-3382

--

-----  
Date: Thu, 16 Aug 2001 18:02:53 -0400

From: "Wilford D. Lindsey" <70511.3041@compuserve.com>

To: ".QRP-L Discussion Group" <QRP-L@Lehigh.edu>

Cc: ")W.D.(Doc)Lindsey/K0EVZ" <70511.3041@compuserve.com>

Subject: [105046] SMK-1 = thanks for replies

Message-ID: <200108161803\_MC3-DCC0-E3C7@compuserve.com>

MIME-Version: 1.0

Content-Transfer-Encoding: quoted-printable

Content-Type: text/plain;

charset=ISO-8859-1

Content-Disposition: inline

Gang:

Gadzooks, 4 replies came back almost immediately. Many thanks, everyone.=  
=

Now here's hoping my order was not somehow lost in the shuffle :-).

73,  
--Doc/K0EVZ

-----  
Date: Thu, 16 Aug 2001 17:55:43 -0400  
From: "Hare,Ed, W1RFI" <w1rfi@arrl.org>  
To: "'Cap Schwartz'" <caps@luminate.com>, "Low Power Amateur Radio Discussion (E-mail)" <qrp-1@Lehigh.EDU>  
Subject: [105047] RE: QRP rigs  
Message-ID: <125490A005E3D3118C9C00805FC743CC023B36E9@KAHLESS>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"

< Second, a question: Absent the knowledge that you have of the site "from the inside", how would I find these pages from the League's home page? Is there a better way than simply doing a search on QRP from that page? I keep finding nuggets such as these when others point them out, but they aren't all that obvious when I look for such on my own.>

Hi, Cap,

Well, I point out the ARRL pages often because those are the ones I know best. :-) The search engine on the ARRL site is, um..., well..., not the best one I have ever used. :-) It often pays to become familiar with the site itself -- or ask QRP's low friend in high places in the ARRL Lab for a few pointers.

The line near the top of the page that says:

Operating Activities    Licensing    News/Bulletins    Services    Educational  
Public Service    Support

all has drag down menus that get you to most of the top-level pages on the ARRL web site.

The pages I refer most often are found on the ARRL Tech Info Service pages. The top-level page for that service is <http://www.arrl.org/tis>

On the TIS pages, there are a number of info packages. Most of those

packages consist of .html text and a number of downloadable articles. About half of the articles are "public;" the other half are on the members-only pages. (Virtually all of the articles are from QST, so it does make some sense to make the QST articles available to members.)

In addition to the packages, the ARRL TIS guys have made a searchable database available at:

<http://www.arrl.org/tis/tisfind.html>

The search engine is "flat," meaning that you can search on any word in the database. So if you remember that a company was located on "Riverdale" St, but don't remember the name or the city, search on Riverdale. In addition, the TIS staff has entered keyword categories for each of the companies, so if you want to know who makes solar panels, either type in "SOLAR" or any of the other keywords. A handy-dandy keyword list is also viewable/downloadable, to help you do intelligent searching. Try "QRP" and see what happens. :-)

The QST and QEX search-engine database is available at:

<http://www.arrl.org/members-only/qqnsearch.html>

The articles, too, are categorized with keywords, although, unfortunately, the keywords do NOT appear when you do a search. But if an antenna-tower article was called "The Mid-Michigan Skyhook" it will show up when you type in Michigan, Skyhook or "TOWER INSTALLATION". As in the TISFIND page, a handy downloadable list of categories is there to help with searching. So are some search tips written by our TIS guy, Al Alvareztorres, after he got one inquiry too many from folks who couldn't find an article. In general, search broadly, then scan the articles for what you really need, unless you get too many. You can also search by author, so type in Hare to get me and one other Hare, W1RFI for articles written under my current call, or KA1CV for my older ones.

Other areas that are semi-technical that I often refer folks are in the Regulatory Information Branch pages. These cover things like tower ordinances, CC&Rs, what to do if the cops show up to arrest you, etc. See <http://www.arrl.org/FandES/field/regulations/>.

I won't go too far afield, because most of the pages can be found using the drag-down menus, but there are literally thousands of pages there, on as many topics. While not a links-to-links site like the top-notch AC6V site, the ARRL web pages do have a lot of really good original stuff. Last time I counted, there were over 500 articles available for download from the TIS pages. Just an example of some of what the League does with the money that falls out of the coffers once in a while. :-)

73,  
Ed Hare, W1RFI  
ARRL Lab  
225 Main St  
Newington, CT 06111  
Tel: 860-594-0318  
Internet: w1rfi@arrl.org  
Web: <http://www.arrl.org/tis>

-----Original Message-----

From: Cap Schwartz [mailto:caps@luminate.com]  
Sent: Thursday, August 16, 2001 5:31 PM  
To: w1rfi@arrl.org; Low Power Amateur Radio Discussion (E-mail)  
Subject: RE: QRP rigs

Ed:

First, a big thank you for sticking around QRP-L and pointing these kinds of things out, particularly for those of us who are new to QRP.

Second, a question: Absent the knowledge that you have of the site "from the inside", how would I find these pages from the League's home page? Is there a better way than simply doing a search on QRP from that page? I keep finding nuggets such as these when others point them out, but they aren't all that obvious when I look for such on my own.

73,  
Cap K6JHR

-----Original Message-----

From: Hare, Ed, W1RFI [mailto:w1rfi@arrl.org]  
Sent: 16 August, 2001 13:11  
To: Low Power Amateur Radio Discussion  
Subject: RE: QRP rigs

Hi, Tim,

Welcome to QRP. There are number of QRP rigs featured on the ARRL Web page at:

<http://www.arrl.org/tis/info/qrphome.html>

<http://www.arrl.org/tis/info/qrpprojs.html>

a number of "reviews" of some of the the various QRP-rig kits that are/were available is found at:

<http://www.arrl.org/tis/info/qrpkits.html>

(Note for the squeamish -- some of these are available on the ARRL members-only page. If any of you all are new hams, or new to HF, and want a

copy of the members-only articles, email me and I will send it to you.)

73,

Ed Hare, W1RFI  
ARRL Lab  
225 Main St  
Newington, CT 06111  
Tel: 860-594-0318  
Internet: w1rfi@arrl.org  
Web: <http://www.arrl.org/tis>

> -----Original Message-----

> From: Tim A. King Jr. [mailto:iflyos@hotmail.com]

> Sent: Thursday, August 16, 2001 11:48 AM

> To: Low Power Amateur Radio Discussion

> Subject: QRP rigs

>

>

> Guys,

> I am new to the list, and a new Ham as well. (Only a

> lowly tech, but

> working on the upgrade to General as soon as I can get the

> code down.) In

> the mean time, Thanks to my elmers and my YL's father I have

> developed a

> great interest in QRP.

>

> My question is as follows: I would like to build a fairly

> simple QRP CW rig

> of some sort. I am asking for suggestions from the group as

> to what would

> be a good place to start. I have an electronics background

> (I was a 68L

> (avionics tech) in the Army) but I have never done any rf

> designing. I was

> hoping to find something that to build that parts would not

> be impossible to

> come by, and I was looking at 40 meters and up, because I

> live in a CCR

> apartment, and all my antennas have to be in the attic. (Not

> alot of room up

> there...)

>

> Any suggestions would be appreciated!

>

> 73 & gud QRP,

>

> Tim A. King, Jr.

> KG4MQD

> Safety Officer, Hobby Park R/C Aircraft Club  
> Winston Salem, NC  
> AMA# 578668  
>  
>  
> -----  
> Get your FREE download of MSN Explorer at  
> <http://explorer.msn.com/intl.asp>  
>

-----  
Date: Thu, 16 Aug 2001 18:05:18 -0400  
From: Ed Kessler <edkess@pa.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Cc: "Eastern PA QRP Club" <epaqrp-1@Lehigh.EDU>  
Subject: [105048] TT Filters Still FS, Speech Processor Sold  
Message-ID: <5.0.2.1.0.20010816180410.00a1d0b0@mail.pa.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

I have the following Ten Tec accessories for sale:

Crystal Filters (used but in excellent condition):  
#217 500 Hz 8 Pole Ladder Filter, 9 MHz (for 562 / 563/ 564 narrow  
position; 546)  
#218 1.8 KHz 8 Pole Ladder Filter, 9 MHz (for 562 / 563/ 564 narrow  
position; 546)  
\$70.00 each plus \$4 shipping.

-----  
Date: Thu, 16 Aug 2001 15:18:36 -0700  
From: Jim Lowman <jmlowman@ix.netcom.com>  
To: qrp-1@lehigh.edu  
Subject: [105049] QRP Dinner Get-Together at SW Division Convention in Riverside  
Message-ID: <3B7C46BC.D35922C5@ix.netcom.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Gang,

You have probably read Bill's (K6WHP) messages about the QRP Forum at the Southwestern Division Convention in Riverside, CA on September 7-9. Bill did an outstanding job of taking the concept of having a major QRP happening at the convention and making it a reality. I've been

attending the various venues (Long Beach, San Diego and Arizona) of this convention since 1995, and I don't recall having more than one program about QRP at any given convention.

Since an informal dinner on Friday is the tradition at Pacificon (I try to steal ideas from the best :-)) I am willing to organize such a dinner at Riverside if there is sufficient interest.

There is a great Mexican restaurant a couple of miles from the convention site; Judy and I have lunch there almost every Sunday. I have spoken with the owner and, if we can get 50 or more QRPers (guests and prospective QRP converts are welcome) to agree, he is willing to close the dining room to the public, at least from about 6:00-7:30 or so, to host our event.

Probably the simplest way to do this, to ensure that everyone is served at approximately the same time, is to ask each person who signs up to indicate a choice of one of three combination dinners, to be specified next week. I'd expect the meal to be \$10 or less, including tax, tip and a choice of non-alcoholic beverage; you are on your own for the other type.

Unfortunately, even though Riverside is a much larger city than Concord, it does not have a good burger place like Fuddrucker's, where each person goes through the line, orders and pays. I think there was a Fuddrucker's at one time, but it didn't last.

So, please let me know if you're interested and I'll get a list going. I'd like to get a "yea" from everyone before August 26th, at which time I'll post the list to QRP-L.

\*\* Please reply to me, and not to QRP-L! \*\*

OK, I'll get the ball rolling:

Jim (AD6CW) [1]

72 de Jim - AD6CW

-----

Date: Thu, 16 Aug 2001 18:23:51 -0400  
From: John Wagner <john@wagner-usa.net>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [105050] FOX: Foxhunt this evening  
Message-ID: <3B7C47F7.10E9E687@wagner-usa.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii



Content-Transfer-Encoding: 7bit

Just looked at the announcement for the Fox hunt this evening; two great Foxii are up to bat!

I can always work Ron, W8RU from here and he's a great op - always hears me<g>. Something about MI, FL and TX - I can work 'em all with a wet blade of grass for an antenna.

Then there is Larry, N2WW - guys, if you wanna hear someone mow 'em down, listen to Larry tonight - he is incredible. If I'm not mistaken, Larry holds the record for most pelts handed out ever.

Hope to hear you on the air this evening going after these two Foxii.

73 de John, N1QO

--

John Wagner - john@wagner-usa.net

Web page: <http://www.neknetwork.com>

-----

Date: Thu, 16 Aug 2001 15:37:11 -0700

From: Beth Gardner / Dan Maguire <BethDan@pacbell.net>

To: qrp-l@Lehigh.EDU

Subject: [105051] MININEC vs NEC vs X-Beams

Message-ID: <3B7C4B17.A7C@pacbell.net>

MIME-version: 1.0

Content-type: text/plain; charset=us-ascii

Content-transfer-encoding: 7BIT

Ed Hare mentioned the article by Roy Lewallen on some of the limitaitons of MININEC ("MININEC: The Other Edge of the Sword"). LB Cebik has written a similar article ("Under the Limits: MININEC") as part of a continuing series on antenna modeling for the AntenneX online magazine. LB also places these articles on his web site. In all fairness to MININEC, LB also has an article on the limitations of NEC2 ("Within the Lines: NEC-2").

LB points out that there is no clear "winner" between MININEC and NEC2 when it comes to modeling X-beams. MININEC is "better" if the model has different element diameters, such as a mix of wire and tubing, but you have to be careful both with the height above ground (at least 0.2 wavelengths for accurate gain and source impedance figures) and with the acute angle where some of the elements meet (requires careful use of segment length tapering, which the outer wrapper program may handle automatically). NEC2 has no problems with (reasonably) low heights and sharp angles, but can't handle a direct connection of wire to tubing.

So NEC2 is "better" if the X-beam model is relatively low and is made entirely of wire.

MININEC is the core used by the "outer wrapper programs" MMANA and NEC4WIN. NEC2 is the core used by EZNEC and NECWin Plus.

Links:

Lewallen on MININEC: <http://www.arrl.org/tis/info/pdf/9102018.pdf>  
Cebik on MININEC: <http://www.cebik.com/amod2.html>  
Cebik on NEC2: <http://www.cebik.com/amod3.html>  
AntenneX magazine: <http://www.antennex.com>  
MMANA: <http://www.geocities.com/mmhamsoft/>  
NEC4WIN: <http://www.orionmicro.com>  
EZNEC: <http://www.eznec.com>  
NECWin Plus: <http://www.nittany-scientific.com>

Other NEC2 info and packages (all freeware), including Unix versions and one that runs under Microsoft Excel:

<http://www.qsl.net/wb6tpu/swindex.html>

Free antenna feed system (transmission lines, series sections, stubs, tuners, etc.) modeling software: <http://www.qsl.net/ac6la/>

73,  
Dan AC6LA

-----  
Date: Thu, 16 Aug 2001 18:51:17 -0400  
From: Ed Kessler <edkess@pa.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Cc: "Eastern PA QRP Club" <epaqrp-1@Lehigh.EDU>  
Subject: [105052] TT 1.8KHz Filter Still FS, Remaining items sold  
Message-ID: <5.0.2.1.0.20010816184838.00a1ec30@mail.pa.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

The 500Hz filter and the Speech Processor have been sold.

Still For Sale:

#218 1.8 KHz 8 Pole Ladder Filter, 9 MHz (for 562 / 563/ 564 narrow position; 546)  
\$70.00 plus \$4 shipping, OBO.

Thanks for the bandwidth,

73s

Ed AA3SJ

Ed Kessler AA3SJ  
950 Woodside Station Road  
Millersburg, PA 17061

website: <http://www.qsl.net/aa3sj>

-----  
End of QRP-L Digest 2283

\*\*\*\*\*  
-----